

VILLAGE OF LA GRANGE
Department of Public Works

BOARD REPORT

TO: Village President, Village Clerk, Board of Trustees, and Village Attorney

FROM: Robert J. Pilipiszyn, Village Manager
Ryan Gillingham, Director of Public Works
Lou Cipparrone, Finance Director

DATE: March 9, 2015

RE: **ENGINEERING SERVICES AGREEMENT- 50th STREET STORM
SEWER**

This past summer the Village experienced multiple high intensity rain events that exceeded the limited capacity of the Village's sewer system resulting in flooded basements, overland flooding in a number of depressional areas and private property drainage issues. In response to the increasing frequency and intensity of rain events, the Village Board requested staff to pursue funding and engineering solutions that reduce flooding in an affordable and shorter time frame than currently planned.

In late September, staff recommended to the Board a tiered approach to the prioritization of flooding objectives given the Village's limited resources. In the first tier, staff recommended implementing solutions that will address overland flooding and water pooling in depressional areas. Staff recommended implementing these solutions first as residents that experience this type of flooding are generally unable to undertake individual private property solutions to address this type of flooding. In the second tier, staff recommended implementing solutions that will reduce the frequency of combined sewer backups. As the next tier, staff recommended carrying out solutions that reduce the incidences of rear yard flooding.

Based on this tiered approach, a contract with Baxter & Woodman was executed in September, 2014 to update the hydraulic model of the area south of 47th Street to evaluate alternatives that directly address overland flooding in the depressional areas. The report was completed in December, 2014 and presented to the Board.

From this report, staff recommendations, and Board discussion a list of recommended flood mitigation projects were developed. First, the hydraulic model determined that a storm sewer constructed on 50th Street to the depressional area of 50th and Spring with laterals constructed to other depressional areas was the most effective solution to reduce the incidences of overland flooding. Also included is the construction of a floodwall on Brainard Avenue which will increase the overtopping elevation of storm water from upstream, which includes

the adjacent La Grange Country Club. Lastly, based on the almost complete sewer televising program, approximately \$775,000 in sewer repairs were identified. These repairs will most likely be a combination of point repairs and sewer lining. The preliminary cost estimate to construct the recommended improvements was provided as follows:

Flood Mitigation Projects – Phase 1		Cost
A	Construct 50 th Street Relief Sewer to Depression 2	\$11,720,000
B	Construct Lateral to Depression 5	\$2,110,000
	Subtotal	\$13,830,000
C	Brainard Avenue Floodwall	\$1,000,000
	Sub-Total Flood Mitigation Projects	\$14,830,000
D	Fast-Track Sewer Lining	\$775,000
	Total Sewer Improvements	\$15,605,000

At the January 26, 2015 Board meeting staff proposed to initiate detailed engineering for both the 50th Street storm sewer including the lateral constructed to Depression No. 5 and the Brainard Avenue floodwall in order to implement these projects as soon as possible. Due to the anticipated time required for the permitting and engineering process, staff advised the Village Board that by starting now, it will provide the Village with the best opportunity to start construction of the 50th Street storm sewer in the Spring of 2016 and receive the flood mitigation benefits of the project.

Staff requested and received a proposal from Baxter & Woodman, Inc. to perform the detailed engineering and design work for the construction of the 50th Street Storm Sewer in an amount not to exceed \$644,000.

This proposal amount is divided between two separate tasks. Under the base task Baxter and Woodman proposes to perform the design engineering related to the 50th Street Storm Sewer and lateral to Area 5 in the amount of \$617,360. At our request as an additional phase to the base design, Baxter and Woodman proposes to perform design engineering as it relates to the reconstruction of the existing outfall, if required, in the amount of \$26,640.

In between the time that Baxter and Woodman completed and presented the hydraulic study, we conducted additional field exploration of the outfall and the final segment of pipe leading up to the outfall into the quarry. We obtained preliminary information which may affect the hydraulics of the 50th Street Storm Sewer. For example, what we learned in the field is that the pipe diameter varies; this information is different than what is reflected on our sewer atlas and on our easement. Therefore, it would be appropriate for Baxter and Woodman to confirm

and document the condition and location of the existing outfall. This information will then be used to determine if the outfall needs to be replaced based on its condition or upsized based on the hydraulic modeling. This additional work would only be performed should the Village need to rebuild the existing outfall or desire to upsize the existing pipe based on Board direction.

A copy of the task order is attached for your consideration and review. Staff recommends approval of the agreement with Baxter & Woodman for this work based on their experience, familiarity with the project and past performance with the Village. If approved, the attached task order with Baxter & Woodman Inc. will be executed for this work in accordance with their municipal engineering contract.

Specifically, the scope of work for this project includes completing the detailed surveying, defining the sewer model and inlet calculations, meeting with various stakeholders, taking pavement cores, performing a subsurface utility investigation, geotechnical environmental assessment, performing a value engineering and alternatives analysis, obtaining permits for the project and developing the detailed cost estimates and bidding documents for the project.

The Village Board is currently considering a combination of fee and tax increases including a referendum to fund the flood mitigation projects as part of the budget development and budget adoption process. In the interim, staff proposes to use Capital Project Fund reserves for this engineering work and then be reimbursed through the proposed bond funds should the April referendum pass. If the referendum does not pass the professional services engagement will be suspended and the project will need to be re-assessed by the Village Board in terms of funding and scheduling.

The current schedule for the project is as follows:

Action	Completion Date
Detailed Engineering	March 2015 – November 2015
Permitting	October 2015 – January 2016
Bidding & Award	January 2016 – February 2016
Construction	Spring 2016 – Spring, 2018

In summary, we recommend approval of the task order contracts with Baxter & Woodman in the amount of \$644,000 for the completion of the detailed engineering and design for the construction of the 50th Street Storm Sewer, lateral to Depression No. 5 and outfall if required.

VILLAGE OF LA GRANGE, ILLINOIS
50TH STREET RELIEF STORM SEWER

TASK ORDER NO. 78

In accordance with Section 1.2 of the Master Contract executed May 13, 2013 between the Village of La Grange (the "Village") and Baxter & Woodman, Inc. (the "Consultant"), the Parties agree to the following Task Order Number 78:

1. Contracted Services:

Baxter & Woodman, Inc. shall provide the Village with design engineering and bidding services for the installation of a relief storm sewer along 50th Street and a lateral storm sewer to improve drainage in Depression 5 (9th Avenue and 48th Street).

All terms and conditions of the master task order contract executed May 13, 2013, with the Village of La Grange shall apply.

Hanson Material Services shall be named as an additional insured party for this Project.

2. Project Schedule:

Detailed Engineering	March, 2015 – November, 2015
Permitting	October, 2015 – January, 2016
Bidding & Award	January, 2016 – February, 2016
Construction	Spring 2016 - Spring 2018

3. Project Completion Date:

All services shall be completed prior to February 29, 2016.

4. Project Specific Pricing :

Our engineering fee for the stated scope of services shall be compensated on a cost plus fixed fee basis in an amount not to exceed \$617,360. If the Village elects to include the design of a new outfall to the Hanson Quarry in our scope of services, our engineering fee shall not exceed \$644,000.

5. Additional Changes to the Master Contract (if applicable):

N/A

[signature page follows]

VILLAGE



Signature

Ryan Gillingham

Director of Public Works

March 4, 2015

Date

CONSULTANT



Signature

John V. Ambrose

Name (Printed or Typed)

March 3, 2015

Date

If greater than \$2,000, the Village Manager's signature is required.

Signature

Village Manager

Date

If greater than \$10,000, the Village Board must approve the Task Order in advance and the Village President's signature is required.



Signature

Thomas E. Livingston

Village President

3/9/15

Date

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VILLAGE OF LA GRANGE, ILLINOIS
50TH STREET RELIEF STORM SEWER

EXHIBIT A

PROJECT DESCRIPTION

This Project consists of design and bidding services for the installation of a relief storm sewer along 50th Street and a lateral storm sewer to improve drainage in Depression 5 (9th Avenue and 48th Street).

The relief storm sewer along 50th Street will connect to the existing storm sewer outfall to the Hanson Quarry at East Avenue and will extend west to Depression 2 (50th Street and Spring Avenue), including additional storm sewer and inlets necessary to improve drainage within Depression 2.

The lateral storm sewer will connect to the proposed relief storm sewer along 50th Street and will extend north to Depression 5 (9th Avenue and 48th Street), including additional storm sewer and inlets necessary to improve drainage within Depression 5.

The Village may elect to include the design of a new outfall to the Hanson Quarry in the Project.

VILLAGE OF LA GRANGE, ILLINOIS
50TH STREET RELIEF STORM SEWER

EXHIBIT B

SCOPE OF SERVICES

1. PROJECT MANAGEMENT

- Plan, schedule, and control activities to complete the Project. These activities include, but are not limited to, budget, schedule, and scope. Submit a monthly status report via email describing tasks completed the previous month and outlining goals for the subsequent month.

2. TOPOGRAPHIC SURVEY

- Perform topographic survey of the Project limits of natural and man-made features to develop base sheets for Project drawings. The Project limits are considered to be:
 - The East Avenue right-of-way from 50th Street to approximately 250 feet south of 50th Street;
 - The 50th Street right-of-way from East Avenue to Waiola Avenue;
 - The 10th Avenue right-of-way from 50th Street to 48th Street;
 - The 48th Street right-of-way from 10th Avenue to 8th Avenue;
 - The Kensington Avenue right-of-way from 50th Street to 49th Street; and
 - The Spring Street right-of-way from 50th Street to 49th Street.

State plane coordinates and NAVD 88 will be used for horizontal and vertical controls.

- It is anticipated the topographic survey will not require Prevailing Wage for Survey Workers to be paid to technicians performing the work. In the event it is determined the topographic survey is covered work under the Illinois Prevailing Wage Act (820 ILCS 130), Baxter & Woodman, Inc. will negotiate with the Village to determine an equitable increase in compensation to meet the requirements of the Act.

The outfall to the Hanson Quarry will be located using the best information available, such as GPS location, provided that access to the Quarry is authorized.

3. UTILITY LOCATES

- Complete a Design Stage Request with JULIE, which consists of obtaining names and telephone numbers of utilities located within the work area.
- Contact utilities, obtain atlases where available, and provide preliminary Drawings to utility companies for their markup and return.
- If utility relocations are found to be needed due to conflict with a proposed pipeline, work with utility company engineers to provide information and assistance as needed.

4. PAVEMENT CORES

- Arrange for a sub-consultant to collect up to 14 pavement cores of the surface and base material for determining the composition of the existing pavement material within the Project limits.
- Sub-consultant services for Pavement Cores are estimated to cost \$5,700, which is included in the Not-to-Exceed amount.

5. SUBSURFACE UTILITY INVESTIGATION

- Arrange for a SUE sub-consultant to explore for, and horizontally and vertically locate, existing underground utilities at critical locations.
- Sub-consultant services for Subsurface Utility Investigation are estimated to cost \$10,000 which is included in the Not-to-Exceed amount.

6. GEOTECHNICAL ENVIRONMENTAL ASSESSMENT

- Arrange for a geotechnical sub-consultant to complete Potentially Impacted Property (PIP) Evaluation and Analytical Testing and Analysis necessary to determine if the excess and/or unsuitable soils at the site can be classified as Clean Construction or Demolition Debris (CCDD) and accepted at an Uncontaminated Soil Fill Operations (USFO) facility.
- Potentially Impacted Property (PIP) Evaluation: Evaluate current Federal and State environmental agency records for the site by obtaining a Radius Map Report from Environmental Data Resources, Inc. (EDR). Review of the Radius Map Report assists in identifying potential contamination sources from the project site as well as nearby properties which may cause it to be considered a PIP. Perform a reconnaissance to evaluate the site and surrounding area for evidence of the use or release of hazardous substances or petroleum products.
- Analytical Testing and Analysis: Complete analytical testing and analysis on soil samples. Prepare summary report describing the sampling procedures and the results of the analytical testing. Complete Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist (Form LPC-663) if all constituents meet their respective Maximum Allowable Concentrations (MACs).
- Sub consultant services for Geotechnical Environmental Assessment are estimated to cost \$10,000, which is included in the Not-to-Exceed amount.

7. MEETINGS

- Hold a kick-off meeting with Village staff and the Project team to establish clear lines of communication, introduce Village staff to the team members, and establish the Village's detailed needs, objectives, and goals for the Project. The meeting will also be used to set schedules and guidelines for any future design meetings.

- Conduct three (3) meetings with staff at times during the design of the Project to clarify staff recommendations, design questions, and/or construction methods. Design meetings will consist of one preliminary “red” line meeting, where the initial layout is approved, one meeting at 75 percent completion, and one meeting at 95 percent completion.
 - Conduct one (1) public informational meeting for impacted property owners and other stakeholders from the Project Area.
 - Conduct one (1) meeting with representatives of Hanson Material Services.
 - Present the Project at one (1) Village Board meeting.
8. SITE VISITS FOR DESIGNERS
- Conduct site visits to familiarize the designer(s) with the sites, clarify any discrepancies on the Drawings, and identify the horizontal and vertical alignment of the storm sewer pipe and roadway.
 - Walk the sewer routes with Village staff to: resolve deficient/questionable items from the topographic survey; evaluate the condition of existing pavements, drainage structures, and curb and gutter; confirm the horizontal and vertical alignment of new sewers; identify areas conducive for contractor staging; identify parkway features to be protected, and evaluate restoration options.
 - Prepare guidelines for protection of parkway features/trees, traffic control, construction staging, and restoration for the Village’s use in communicating with residents, and for use during detailed design.
9. SEWER MODELING AND INLET CALCULATIONS
- Update the hydraulic model with preliminary design data for the proposed storm sewer improvements to confirm the required storm sewer sizes, elevations, and number, size and location of inlet structures.
 - Modify the model and/or the design and analyze the proposed design to verify it matches the intent of the Project and conforms to the modeling (and vice versa).
 - Evaluate the benefits of smaller diameter pipes at the upstream end of the relief sewer and larger diameter pipes at the downstream end. These modifications may help the Village optimize the flood reduction benefits of the relief sewer for multiple depressional storage areas.
 - Evaluate inlet capacity in the areas of proposed drainage improvements. This includes evaluating the benefits of intercepting drainage from south of 50th Street at intersections along 50th Street.
10. DESIGN DOCUMENTS
- Develop base sheets of natural and man-made features from topographic survey data.
 - Indicate the location of utilities obtained from the best available records, including utility company atlases.

- *ROW Analysis:* Determine the preferred improvement right-of-way requirements, if needed, and need for acquisition. Recommend and identify necessary temporary construction easements, permanent easements, or right-of-way acquisition to complete the proposed improvements. Cost of preparing plats, appraisals, and negotiations (if needed) are not included in the scope of this work.
- *Roadway Design:* Prepare plan and profile sheets for the roadway design including improvement limits, stations and offset callouts, driveway repairs, rehabilitation strategy, curb and gutter replacement, sidewalk ramp replacement, utility structure adjustments, pavement marking, and note special instructions to the Contractor.
- *Drainage and Utilities Design:* Prepare the inlet and lateral storm sewer design for the proposed improvements.
- *Maintenance of Traffic and Construction Staging:* Develop a preferred maintenance of traffic and staging plan. Complete a design of the preferred staging plan which will include a detour or staged construction and submit to the Village for comment and approval. Prepare construction staging notes, typical sections, and layout to maintain local traffic flow through the construction zone. Confer with Village staff, emergency services, and public transportation agencies to consider local impacts and concerns.
- *Cross Section Design:* Design roadway cross sections at 100-foot intervals and all cross streets, driveways and cross-road culverts. Compute earthwork calculations. Stage construction earthwork calculations are not anticipated.
- *Detailed Drawings:* Complete required Drawing sheets required for bidding including: Cover, General Notes, Summary of Quantities, Schedule of Quantities, Typical Sections, Erosion Control, Removals, Plans and Profiles, Pavement Markings, Landscaping, and Cross Sections.
- *Specifications:* Prepare Specifications in conformance with the format of the Construction Specification Institute.

11. CONTRACT DOCUMENTS

- Prepare for review and approval by the Village and its legal counsel the forms of Construction Contract Documents consisting of Advertisement for Bids, Bidder Instructions, Bid Form, Agreement, Performance Bond Form, Payment Bond Form, General Conditions, and Supplementary Conditions, where appropriate, based upon Village of LaGrange standard contract documents.

12. ENGINEER'S OPINION OF PROBABLE COST

- Prepare Opinions of Probable Construction and Total Project Costs for the Project including: construction cost; contingencies; construction engineering services; and, on the basis of information furnished by the Village, allowances for legal services, financial consultants, and any administrative services or other costs necessary for completion of the Project.

13. VALUE ENGINEERING AND ALTERNATIVES ANALYSIS

- Determine if the proposed improvements can be designed and constructed using alternate methods or materials to reduce construction and operation and maintenance costs, or to reduce the frequency or intensity of flooding events.
- Evaluate the use of stormwater BMPs, including green infrastructure, in the Project.
- Work with Village to determine the condition of the existing sewer, alternatives to replacement, and whether or not construction means and methods might affect existing sewer main line pipe.

14. PEER AND CONSTRUCTABILITY REVIEWS

- Conduct QA/QC peer reviews of drawings and specifications.
- Utilize Construction Department personnel to provide a review of drawings and specifications.
- Make revisions based upon comments from both engineering and construction department comments.

15. PERMITS AND AGENCY COORDINATION

- Submit the design documents to obtain permits from MWRD and IDOT, including meetings with these agencies, if necessary, and supporting exhibits.
- Submit a Notice of Intent and the Stormwater Pollution Prevention Plan to the IEPA for a General NPDES Permit No. ILR10.
- Submit the Stormwater Pollution Prevention Plan to the SWCD for approval.
- Obtain an endangered species consultation from IDNR.
- Obtain a historic preservation consultation from IHPA.
- Apply for a Village site work permit, building permit, and/or tree removal and preservation permit, if required.
- **Application and review fees are not included in the Not-to-Exceed amount.**

16. ASSISTANCE DURING BIDDING

- Assist the Village in solicitation of construction bids from as many qualified bidders as possible.
- Set bid dates with Village, create Advertisement for Bids (AFB), provide AFB to Village for publication, and mail advertisement to selected prospective bidders.
- Answer bidders' questions during bid period.
- Issue necessary addenda to all plan holders as necessary.
- Attend bid opening with Village staff and assist in reviewing and checking of bid package submittals as required.
- Tabulate all bids received and review all bid submittals to verify low bid is responsive and responsible.
- Issue a Letter of Recommendation to Award the construction contract to the Village for their action.

17. QUARRY OUTFALL DESIGN (OPTIONAL)

- Perform survey of area between East Avenue right-of-way and west edge of quarry.

- Prepare plan and profile drawing sheet(s) of topographic survey.
- Design outfall storm sewer pipe and outfall structure at edge of quarry.
- Prepare final drawings for a junction chamber on East Avenue and for the pipe and structure on quarry property.
- Determine additional pay items and quantities for outfall pipe and structure work.
- Add required work and pay items to specifications.

18. ITEMS NOT INCLUDED

- Soil borings, which were collected in 2014 as part of the South Basin Study.
- Design for replacement of water main, sidewalks, and streetlights, which are not expected to be necessary.
- Grant applications.
- Easements or right-of-way acquisitions, which are not anticipated for the Project.
- Legal review of the implications of increasing the volume and rate of discharge to the Hanson Quarry.
- Easement documents and acquisition for a new storm sewer outfall pipe and structure on Hanson Quarry property.

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VILLAGE OF LA GRANGE, ILLINOIS
50TH STREET RELIEF STORM SEWER

EXHIBIT C
DESIGN ENGINEERING AND BIDDING ASSISTANCE

Route: Brainard Avenue
Local Agency: Village of La Grange
(Municipality/Township/County)
Section:
Project:
Job No.: 150174.40

*Firm's approved rates on file with IDOT's Bureau of Accounting and Auditing:	
Overhead Rate (OH)	1.47
Complexity Factor (R)	0.00
Calendar Days	180

Method of Compensation:
 Cost Plus Fixed Fee 1 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
 Cost Plus Fixed Fee 3 14.5%[(2.8 + R)DL] + IHDC
 Direct Labor Multiple
 Specific Rate
 Lump Sum

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by Others	In-House Direct Costs (IHDC)	Profit	Total
PROJECT MANAGEMENT	Engineer III	250	\$ 37.92	\$ 9,480.00	\$ 13,936.00			\$ 3,395.00	\$ 26,811
	Sr. Engineer IV	40	\$ 60.48	\$ 2,419.00	\$ 3,556.00			\$ 866.00	\$ 6,841
	Sr Engineer III	40	\$ 50.50	\$ 2,020.00	\$ 2,969.00		\$ 120.00	\$ 741.00	\$ 5,850
	Sr Engineer III	40	\$ 54.59	\$ 2,184.00	\$ 3,210.00			\$ 782.00	\$ 6,176
TOPOGRAPHIC SURVEY	Engineer III	8	\$ 37.92	\$ 303.00	\$ 445.00			\$ 109.00	\$ 857
	Sr Engineer III	8	\$ 54.59	\$ 437.00	\$ 642.00			\$ 157.00	\$ 1,236
	Survey Tech IV	4	\$ 41.89	\$ 168.00	\$ 247.00			\$ 60.00	\$ 475
	Survey Tech II	300	\$ 29.72	\$ 8,916.00	\$ 13,107.00		\$ 975.00	\$ 3,335.00	\$ 26,333
UTILITY LOCATES	Engineer I	24	\$ 24.95	\$ 599.00	\$ 881.00			\$ 215.00	\$ 1,695
	Clerical I	4	\$ 25.76	\$ 103.00	\$ 151.00			\$ 37.00	\$ 291
PAVEMENT CORES	Sr Engineer I	10	\$ 40.08	\$ 401.00	\$ 589.00	\$ 5,700.00	\$ 30.00	\$ 148.00	\$ 6,868
S.U.E. INVESTIGATION	Engineer III	12	\$ 37.92	\$ 455.00	\$ 669.00	\$ 10,000.00	\$ 30.00	\$ 167.00	\$ 11,321
GEOTECHNICAL ENVIRONMENTAL ASSESSMENT	Sr Engineer I	20	\$ 40.08	\$ 802.00	\$ 1,179.00	\$ 10,000.00		\$ 287.00	\$ 12,268
MEETINGS	Sr Engineer III	36	\$ 50.50	\$ 1,818.00	\$ 2,672.00		\$ 120.00	\$ 669.00	\$ 5,279
	Sr Engineer I	64	\$ 40.08	\$ 2,565.00	\$ 3,771.00		\$ 180.00	\$ 945.00	\$ 7,461
	Sr Engineer III	20	\$ 54.59	\$ 1,092.00	\$ 1,605.00		\$ 60.00	\$ 400.00	\$ 3,157
	CAD Tech IV	24	\$ 41.89	\$ 1,005.00	\$ 1,477.00			\$ 360.00	\$ 2,842
	Engineer III	28	\$ 37.92	\$ 1,062.00	\$ 1,561.00			\$ 380.00	\$ 3,003
SITE VISITS FOR DESIGNERS	Sr Engineer III	16	\$ 54.59	\$ 873.00	\$ 1,283.00		\$ 60.00	\$ 321.00	\$ 2,537
	Engineer III	8	\$ 37.92	\$ 303.00	\$ 445.00			\$ 109.00	\$ 857
	Sr Engineer I	16	\$ 40.08	\$ 641.00	\$ 942.00		\$ 60.00	\$ 238.00	\$ 1,881
SEWER MODELING AND INLET CALCULATIONS	Sr Engineer III	32	\$ 50.50	\$ 1,616.00	\$ 2,376.00			\$ 579.00	\$ 4,571
	Engineer III	200	\$ 37.92	\$ 7,584.00	\$ 11,148.00			\$ 2,716.00	\$ 21,448
	Engineer I	240	\$ 24.95	\$ 5,988.00	\$ 8,802.00			\$ 2,145.00	\$ 16,935
	GIS Tech I	32	\$ 31.67	\$ 1,013.00	\$ 1,489.00			\$ 363.00	\$ 2,865
DESIGN DOCUMENTS	Sr Engineer III	40	\$ 50.50	\$ 2,020.00	\$ 2,969.00			\$ 723.00	\$ 5,712
	Sr Engineer III	520	\$ 54.59	\$ 28,387.00	\$ 41,729.00			\$ 10,167.00	\$ 80,283
	Sr. Engineer IV	80	\$ 60.48	\$ 4,838.00	\$ 7,112.00			\$ 1,733.00	\$ 13,683
	Engineer III	520	\$ 37.92	\$ 19,718.00	\$ 28,985.00			\$ 7,062.00	\$ 55,765
	Sr. Engineer IV	16	\$ 64.71	\$ 1,035.00	\$ 1,521.00			\$ 371.00	\$ 2,927
	Sr. Engineer I	56	\$ 42.96	\$ 2,406.00	\$ 3,537.00		\$ 30.00	\$ 866.00	\$ 6,839
	CAD Tech IV	896	\$ 41.89	\$ 37,533.00	\$ 55,174.00			\$ 13,442.00	\$ 106,149
	Clerical I	16	\$ 25.76	\$ 412.00	\$ 606.00			\$ 148.00	\$ 1,166
	Sr Engineer I	680	\$ 40.08	\$ 27,254.00	\$ 40,063.00			\$ 9,761.00	\$ 77,078
CONTRACT DOCUMENTS	Sr Engineer III	8	\$ 50.50	\$ 404.00	\$ 594.00			\$ 145.00	\$ 1,143
	Sr Engineer III	48	\$ 54.59	\$ 2,620.00	\$ 3,851.00			\$ 938.00	\$ 7,409
	Engineer III	16	\$ 37.92	\$ 607.00	\$ 892.00			\$ 217.00	\$ 1,716
	Sr Engineer I	32	\$ 40.08	\$ 1,283.00	\$ 1,886.00			\$ 460.00	\$ 3,629
	Clerical I	8	\$ 25.76	\$ 206.00	\$ 303.00			\$ 74.00	\$ 583
ENGINEER'S OPINION OF PROBABLE COST	Sr Engineer III	4	\$ 50.50	\$ 202.00	\$ 297.00			\$ 72.00	\$ 571
	Sr Engineer III	24	\$ 54.59	\$ 1,310.00	\$ 1,926.00			\$ 469.00	\$ 3,705
	Sr Engineer I	24	\$ 40.08	\$ 962.00	\$ 1,414.00			\$ 345.00	\$ 2,721
	Engineer III	24	\$ 37.92	\$ 910.00	\$ 1,338.00			\$ 326.00	\$ 2,574
	Engineer I	24	\$ 24.95	\$ 599.00	\$ 881.00			\$ 215.00	\$ 1,695
VALUE ENGINEERING AND ALTERNATIVES ANALYSIS	Sr Engineer III	16	\$ 50.50	\$ 808.00	\$ 1,188.00			\$ 289.00	\$ 2,285
	Sr Engineer III	40	\$ 54.59	\$ 2,184.00	\$ 3,210.00			\$ 782.00	\$ 6,176
	Sr. Engineer IV	40	\$ 60.48	\$ 2,419.00	\$ 3,556.00			\$ 866.00	\$ 6,841
	Engineer III	24	\$ 37.92	\$ 910.00	\$ 1,338.00			\$ 326.00	\$ 2,574
	Sr Engineer I	24	\$ 40.08	\$ 962.00	\$ 1,414.00			\$ 345.00	\$ 2,721
PEER AND CONSTRUCTABILITY REVIEWS	Engineer Tech V	40	\$ 48.32	\$ 1,933.00	\$ 2,842.00			\$ 692.00	\$ 5,467
	Sr. Engineer IV	40	\$ 60.48	\$ 2,419.00	\$ 3,556.00			\$ 866.00	\$ 6,841

VILLAGE OF LA GRANGE, ILLINOIS
50TH STREET RELIEF STORM SEWER

EXHIBIT C
DESIGN ENGINEERING AND BIDDING ASSISTANCE

Route: Brainard Avenue
Local Agency: Village of La Grange
(Municipality/Township/County)
Section:
Project:
Job No.: 150174.40

*Firm's approved rates on file with IDOT's Bureau of Accounting and Auditing:	
Overhead Rate (OH)	1.47
Complexity Factor (R)	0.00
Calendar Days	180

Method of Compensation:
 Cost Plus Fixed Fee 1 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
 Cost Plus Fixed Fee 3 14.5%[(2.8 + R)DL] + IHDC
 Direct Labor Multiple
 Specific Rate
 Lump Sum

Cost Estimate of Consultant's Services in Dollars

Category	Position	Quantity	Rate	Subtotal	Overhead	Complexity	Calendar	Total	Grand Total
PERMITS AND AGENCY COORDINATION	Sr Engineer III	32	\$ 50.50	\$ 1,616.00	\$ 2,376.00			\$ 579.00	\$ 4,571
	Engineer III	80	\$ 37.92	\$ 3,034.00	\$ 4,460.00			\$ 1,087.00	\$ 8,581
	Engineer I	80	\$ 24.95	\$ 1,996.00	\$ 2,934.00			\$ 715.00	\$ 5,645
	GIS Tech I	18	\$ 31.67	\$ 570.00	\$ 838.00			\$ 204.00	\$ 1,612
ASSISTANCE DURING BIDDING	Sr Engineer III	4	\$ 50.50	\$ 202.00	\$ 297.00			\$ 72.00	\$ 571
	Sr Engineer III	16	\$ 54.59	\$ 873.00	\$ 1,283.00			\$ 313.00	\$ 2,469
	Sr Engineer I	12	\$ 40.08	\$ 481.00	\$ 707.00			\$ 172.00	\$ 1,360
	Engineer III	12	\$ 37.92	\$ 455.00	\$ 669.00			\$ 163.00	\$ 1,287
	Clerical I	4	\$ 25.76	\$ 103.00	\$ 151.00			\$ 2,500.00	\$ 399.00
TOTALS		4,994		\$ 207,518.00	\$ 305,049.00	\$ 25,700.00	\$ 4,165.00	\$ 74,928.00	\$ 617,360

QUARRY OUTFALL DESIGN (OPTIONAL)	Sr Engineer III	8	\$ 50.50	\$ 404.00	\$ 594.00			\$ 145.00	\$ 1,143
	Survey Tech IV	12	\$ 41.89	\$ 503.00	\$ 739.00			\$ 180.00	\$ 1,422
	Survey Tech II	12	\$ 29.72	\$ 357.00	\$ 525.00	\$ 65.00		\$ 137.00	\$ 1,084
	Sr Engineer III	40	\$ 54.59	\$ 2,184.00	\$ 3,210.00			\$ 782.00	\$ 6,176
	Sr Engineer I	4	\$ 40.08	\$ 160.00	\$ 235.00			\$ 57.00	\$ 452
	Engineer III	16	\$ 37.92	\$ 607.00	\$ 892.00	\$ 4,000.00		\$ 797.00	\$ 6,296
	Sr. Engineer IV	8	\$ 64.71	\$ 518.00	\$ 761.00			\$ 186.00	\$ 1,465
	Sr. Engineer I	20	\$ 42.96	\$ 859.00	\$ 1,263.00	\$ 30.00		\$ 312.00	\$ 2,464
	CAD Tech IV	20	\$ 41.89	\$ 838.00	\$ 1,232.00			\$ 300.00	\$ 2,370
	Clerical I	4	\$ 25.76	\$ 103.00	\$ 151.00			\$ 37.00	\$ 291
	Sr. Engineer II	24	\$ 46.92	\$ 1,126.00	\$ 1,655.00	\$ 280.00		\$ 444.00	\$ 3,505
	TOTALS		168		\$ 7,659.00	\$ 11,257.00	\$ -	\$ 4,375.00	\$ 3,377.00

In-House Direct Costs:

VEHICLE EXPENSES - TRAVEL MILES @ \$0.575/MILE =
SURVEY VAN CHARGE - \$65/DAY

\$ 0.575
\$ 65.00